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Abstract

PURPOSE: To provide a secondary battery separator with low self-discharge capability and high hydrophilic nature by covering a polyolefin resin porous body with a partially crosslinked polymer of a reactive surfactant and a vinyl resin monomer by chemical bond.

CONSTITUTION: A solution containing a reactive surfactant and a vinyl resin monomer or oligomer is applied to a film or nonwoven fabric porous body made of polyolefin resin containing 0.1% or less each antioxidant and ultraviolet absorber, then they are heat-treated. The reactive surfactant preferably has polyethylene oxide in the structure. The vinyl resin monomer preferably contains ethylene unsaturated acid. By this treatment, a partially crosslinked polymer containing 10% or more each surfactant and resin monomer is formed. Ultraviolet rays irradiate the polymer attached on the porous body to chemically bond the polymer and olefin.